My First Canvas

Aug 07, 2025

## **PROBLEM**

Frequent landslides and flash floods in Himachal Pradesh due to heavy rainfall, glacier melt, and human-induced climate changes.

Lack of real-time, predictive tools for river flow monitoring at local levels.

Poor awareness and preparation among locals due to inaccessible early warning systems.

#### SOLUTION

Al based alert to inform authorities and other concerned peoples.

Stream lit(web app)based interface for local access

Visualize risk status: SAFE, ALERT, FLOOD WARNING

ML (linear regression) model tracking and predicting real time river runoff.

#### UNIQUE VALUE PROPOSITION

A smart Al based real time rain, glacier melt and river monitoring site providing scores and alert to prevent disasters and save life.

An AI temperature, glacier melt and rainfall predictor, tracking level of water discharge.

Accessible using web site Educating and alarming the concerned areas and citizens.

#### **UNFAIR ADVANTAGE**

Low code deployed can be easily scaled to other areas.

Predictive and educative approach

## **CUSTOMER SEGMENTS**

Local Authorities(Disaster Management, water management) Local residents

Tourist

Farmers, Climate Researchers Schools and other active institution

# **EXISTING ALTERNATIVES**

weather forecast Evacuation team

## **KEY METRICS**

No of station deployed the agent No of email sent No of life save cost of destruction reduced Model evaluation matrices

# HIGH-LEVEL CONCEPT

"Saves lives by predicting flood risks from rainfall, temperature, and glacier melt."

# **CHANNELS**

Social media awareness camp Advertisements Workshops Ngo's partnership Github

# **EARLY ADOPTERS**

Flood prone regions Coastal region low-lying areas riverine regions hill stations

## **COST STRUCTURE**

Maintenance and updating cost
Deploying and designing cost
Database and cloud cost
Data collection (surveillance and records)

## **REVENUE STREAMS**

Government funding
Taxation
NGO's grants
Donations or sponserships